## 10/691,328

## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	360	(556/58).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 16:54
L2	280	(556/32).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 16:58
L3	489	(556/57).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 17:57
L4	2024	(502/152).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 18:19
L5	1358	(502/155).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 18:31
L6	1350	(502/162).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 18:48
L7	342	(548/402).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/04/05 18:49

(FILE 'HOME' ENTERED AT 16:25:23 ON 05 APR 2006)

FILE 'REGISTRY' ENTERED AT 16:25:34 ON 05 APR 2006 STRUCTURE UPLOADED

L1

=> d l1 L1 HAS NO ANSWERS

L1 STR

N——A

G1 Mo,W

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:25:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3469 TO ITERATE

57.7% PROCESSED 2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 65848 TO 72912

PROJECTED ANSWERS:

0 TO

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 16:26:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 67551 TO ITERATE

100.0% PROCESSED 67551 ITERATIONS

10 ANSWERS

0 ANSWERS

SEARCH TIME: 00.00.01

L3 10 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 166.94 167.15

FILE 'CAPLUS' ENTERED AT 16:26:07 ON 05 APR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 5 Apr 2006 VOL 144 ISS 15 FILE LAST UPDATED: 4 Apr 2006 (20060404/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at: http://www.cas.org/infopolicy.html => s 13T.4 4 L3 => d 1-4 bib abs ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN T.4 2003:22240 CAPLUS AN 139:22295 DИ A novel synthesis of metallogermacyclopropane and molybdenum ΤI bis (iminophosphorano) carbene complexes from bisgermavinylidene Leung, Wing-Por; So, Cheuk-Wai; Wang, Jin-Zhi; Mak, Thomas C. W. AII Department of Chemistry, The Chinese University of Hong Kong, Shatin, CS Peop. Rep. China Chemical Communications (Cambridge, United Kingdom) (2003), (2), 248-249 SO CODEN: CHCOFS; ISSN: 1359-7345 Royal Society of Chemistry PB DТ Journal English LA OS. CASREACT 139:22295 The reaction of bisgermavinylidene [(Me3SiN:PPh2)2C:Ge Ge:C(PPh2:NSiMe3)2] AΒ (1) with M(CO) 5 (THF) ( M = Cr, W, Mo) afforded the metallagermacyclopropane [(Me3SiN:PPh2)2CGeM(CO)3{M(CO)5}] [M = W (2), Cr (3), Mo (4)]; in one of the reactions, compound 4 reacts further to give a pincer carbene complex [(CO)3Mo{C(Ph2P:NSi Me3)2}] (5); the x-ray structures of compds. 2 and 5 were determined THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 13 ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN T.4 1995:833778 CAPLUS AΝ DИ 124:56189 Metal-carbon multiple bonds: [2+2] cycloaddition of nitrilium salts across TΤ a metal-carbon triple bond; synthesis and structure of iminocarbene complexes of tungsten ΑU Filippou, Alexander C.; Lungwitz, Bernhard; Voelkl, Christian; Herdtweck, Eberhardt Institut fuer Anorganische und Allgemeine Chemie der Humboldt-Universitaet CS zu Berlin, Hessischestr. 1-2, Berlin, D-10115, Germany Journal of Organometallic Chemistry (1995), 502(1-2), 131-5 SO CODEN: JORCAI; ISSN: 0022-328X PR Elsevier DТ Journal LA English OS. CASREACT 124:56189 AB The aminocarbyne complex Cp\*(CO)2W.tplbond.CNEt2 (Cp\* = C5Me5) (1) undergoes a selective [2+2] cycloaddn. reaction with the nitrilium salt [MeC.tplbond.NMe]BF4 to afford the iminocarbene complex [Cp\*(CO)2W{:C(NEt2)C(Me):NMe}]BF4 (2). Alternatively, the analogous iminocarbene complexes [Cp\*(CO)2W{:C(NMe2)C(Me):NEt}]BF4 (5: M = Mo; 6: M = W) can be obtained by methylation of the  $\eta 2-1, 4-\text{diaza}-3$ methylbutadien-2-yl complexes Cp\*(CO)2M[C(NMe)C(Me)NEt] (3: M = Mo; 4: M = W) with [Me30]BF4. The solid-state structure of 2 suggests the presence of an  $\eta$ 3-bonded iminocarbene ligand and reveals a close electronic relationship between 2, 5 and 6 and MoII or WII η3-vinylcarbene complexes. ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN T.4 AΝ 1978:37925 CAPLUS DN 88:37925

- Isocyanide insertion reactions. 1. The importance of  $\eta^2$ -iminoacyl ΤI ligands as intermediates
- ΙΙA Adams, Richard D.; Chodosh, Daniel F.
- CS Dep. Chem., Yale Univ., New Haven, CT, USA
- SO Journal of the American Chemical Society (1977), 99(20), 6544-50

CODEN: JACSAT; ISSN: 0002-7863

- DT Journal
- LA English

AΒ

- The reaction of isocyanides  $(\eta 5-C5H5)M(CO)3-x-(CNR)x$  (M = Mo, R = CH3, x = 1, 2; M = Mo, R = C6H5, x = 1; and M = W, R = CH3, x = 1) with MeI have been investigated. The products include the compds.  $(\eta_5 - C5H_5) Mo(CO) 2 (\eta_2 - CH_3 CNCH_3)$  (I) and  $(\eta_5 - C5H_5) Mo(CO) 2 (\eta_2 - CH_3 CNCH_3)$ CH3CNC6H5) (II), which contain novel dihapto iminoacyl ligands. Reaction of the tungsten anion produces the complex ( $\eta$ 5-C5H5)W(CO)2(CNCH3)(CH3), in which the methyl group is attached to the tungsten atom. Complexes I and II readily add the ligands tetracyanoethylene, trimethyl phosphite, and triphenylphosphine to the metal atoms in a process that converts the  $\eta 2\text{-iminoacyl}$  group into an  $\eta$ 1-iminoacyl group. Addition of iodide ion to I ultimately leads to formation of the complex  $(\eta 5-C5H5)Mo(CO)2(I)[C(CH3)(NHCH3)]$ , which contains a methyl (methylamino) carbene ligand. Reaction of the anion, (η5-C5H5)Mo(CO)(CNCH3)2-, with methyl iodide produces the complex  $(\eta 5\text{-C5H5})\,Mo\,(CO)\,I\,[\text{C}\,(N\,(\text{CH3})\,2)\,\text{C}\,(\text{CH3})\,N\,(\text{CH3})\,]\,.$  This compound was investigated by crystal structure anal. Attached to the molybdenum atom is a slightly skewed pentahapto cyclopentadienyl ring, a linear carbonyl group, and an iodine atom. The most interesting feature is a complex polyhapto carbon-nitrogen containing ligand that has been interpreted as an iminodimethylaminocarbene. All the reaction products have been explained through a scheme that involves a uniform series of addns. and facile isocyanide insertion rearrangements.
- L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1976:591784 CAPLUS
- DN 85:191784
- TI Isocyanide insertion rearrangements and their bonding to transition metal atoms
- AU Adams, Richard D.; Chodosh, Daniel F.
- CS Chem. Dep., Yale Univ., New Haven, CT, USA
- SO Journal of the American Chemical Society (1976), 98(17), 5391-3 CODEN: JACSAT; ISSN: 0002-7863
- DT Journal
- LA English
- AB Treatment of  $(\eta 5\text{-}C5H5)\,\text{Mo}(\text{CO})\,(\text{CNMe})\,2\text{-}\,(\text{I})$  with MeI in THF gave  $(\eta 5\text{-}C5H5)\,\text{Mo}(\text{CO})\,(\text{CNMe})\,2\text{Me2}\,(\text{II})$ . The mechanism involved initial methylation of I at the Mo atom, 2 sequential iodide and solvent promoted isocyanide insertions, followed by rearrangement and incorporation of the more remotely positioned imine function into the Mo bonding sphere, and finally methylation of the other imine group at the N atom to give an Me2N unit. The reactions of  $(\eta 5\text{-}C5H5)\,\text{W}(\text{CO})\,2\text{CNMe-}$  or  $(\eta 5\text{-}C5H5)\,\text{Mo}(\text{CO})\,2\text{CNMe-}$  with MeI and the crystal structure of II supported this mechanism.

## (FILE 'HOME' ENTERED AT 16:21:34 ON 05 APR 2006)

FILE 'REGISTRY' ENTERED AT 16:22:01 ON 05 APR 2006 STRUCTURE UPLOADED

L1

=> d l1 L1 HAS NO ANSWERS

L1 STR



G1 Mo,W

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 16:22:34 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3469 TO ITERATE

57.7% PROCESSED 2000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

65848 TO 72912

PROJECTED ANSWERS:

O TO

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 16:22:41 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 67551 TO ITERATE

100.0% PROCESSED 67551 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1